

Title (en)

PROCESS FOR THE PRODUCTION OF FORM COKE IN A SHAFT FURNACE, AND SHAFT FURNACE FOR CARRYING OUT THE PROCESS

Publication

EP 0098771 B1 19860430 (FR)

Application

EP 83401306 A 19830623

Priority

FR 8211540 A 19820623

Abstract (en)

[origin: EP0098771A1] 1. Process for producing moulded coke in a shaft oven with a vertical axis (1), which is supplied in its upper part (3) with a burden of coal for coking in the form of ovoids, forming a movable bed descending in the shaft (1) in counter flow to gas circulating from the bottom upwards and passing successively from the top downwards through a preheating zone, a coking zone and a cooling zone, the rising stream of gas being formed by the gases released by the coal during its heating and coking and by some of the gases recovered in the upper part of the oven and recycled in the lower part after washing and dust extraction, heat being supplied by circulation of electrical current through the bed of solid materials between electrodes (8) located on two opposite sides of the wall (2) of the oven (1), characterized in that the electrical heating is carried out in a controlled way over a specific height in the middle part (C) of the oven (1), electric currents, the intensities of which can be regulated, being passed through the burden in several staggered horizontal planes, and in that, by adjustment of the circulation of the gases and of the electrical power distributed to the various levels of electrodes according to the heat requirements and the electrical resistance of the burden, a progressive and uniform heating of the latter is controlled during its descent in the oven according to a law of heating selected as a function of the type of coal, to preserve the shape of the ovoids, in such a way that the temperature of the bed of solid material is between 600 degrees C and 850 degrees C at the entrance of the middle zone (C) of electrical heating and that coking is carried out completely in this zone (C) at a temperature remaining between 950 degrees C and 1150 degrees C, the coke ovoids subsequently being cooled in the lower part of the oven (1).

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